

## ABSTRACT

In certain preferred embodiments, the present invention provides a grinding machine for creating depression patterns in a surface such as asphalt or concrete. The depression pattern may be a rumble strip for alerting drivers who drift off a driving lane, or may be for other uses. Use  
5 of a depression pattern (instead of protrusions) eliminates interference with snowplow operation in areas where plows are used. In the present invention, the grinding machine is based on a trolley which moves at a uniform height along a surface, and includes a forward “gauge” wheel which controls the relative grinding drum depth based on the wheel position and rotation. In a preferred embodiment, the grinding assembly is raised and lowered relative to the trolley in  
10 correspondence with the advancement of the trolley.